Overview
The recent recession left a natural void of newly originated private label commercial mortgage-backed securities (CMBS). As a result, this has spurred impressive growth rates of CMBS issuance by the Government Agencies. The Agency CMBS market provides financing for multifamily housing and healthcare facilities with either the explicit US government guarantee or by one of the Government Sponsored Entity (GSE) guarantees for the full recovery and timely payment of principal and interest. There are several Agency-backed CMBS products available to investors and many offer the same liquidity and credit protection benefits enjoyed by the Agency Single Family MBS market. However, one key benefit that CMBS pools offer to investors is the presence of more robust call protection features. Today, the most common CMBS products include Fannie Mae’s Delegated Underwriting and Servicing program (FNMA DUS), Freddie Mac’s K Certificates (FHLMC K-Certs), and Ginnie Mae’s Construction or Project Loan program (GNMA CL/PL). Exhibit 1 below details the advantages and disadvantages of each.

Exhibit 1: Agency CMBS Advantages & Disadvantages

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<thead>
<tr>
<th></th>
<th>Advantages</th>
<th>Disadvantages</th>
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<tbody>
<tr>
<td>FHLMC K-Certs</td>
<td>Liquidity &amp; Call Protection</td>
<td>Subordinate Classes Not Guaranteed</td>
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<tr>
<td></td>
<td>Mostly Defeased - Best Call Protection</td>
<td>Limited Historical Data</td>
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<td></td>
<td>Multiple Loans Per Pool (Average 70+)</td>
<td>No Interim Cash Flow</td>
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<tr>
<td>FNMA DUS</td>
<td>Liquidity &amp; Call Protection</td>
<td>Single Loan Pools</td>
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<td></td>
<td>Loss Sharing with Lenders</td>
<td>Yield Maintenance Fee Not Guaranteed</td>
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<td></td>
<td>Largest CMBS Participant</td>
<td>Light Interim Cash Flow</td>
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<tr>
<td>GNMA CL/PL</td>
<td>Liquidity &amp; Call Protection</td>
<td>Higher LTV Limitations</td>
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<td></td>
<td>Explicit Government Guarantee</td>
<td>Higher Default Rates (although modest)</td>
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<td></td>
<td>Diversity - Multiple Loan Programs</td>
<td>Premiums Paid Back at Par via Defaults</td>
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Underwriting
All of these programs adhere to rigorous underwriting standards including conservative LTV requirements and minimum Debt Service Coverage Ratios (DSCR). There are several loan programs with different LTV limits within the GNMA CL/PL program but none may exceed 90% while FNMA DUS and FHLMC K-Certs cannot exceed 80%. The DSCR is calculated by dividing the annual net operating income of the property by the interest expense of the loan. The higher the DSCR, the better and all programs have a minimum 1.15x threshold. To aid in the ongoing review of loan performance in the pool, investors are provided with a watch list which includes loans that fail to meet certain underwriting covenants such as DSCR and LTV provisions.

Call Protection Features
Given the massive wave in refinance activity over the past 2 years, many investors were hit with substantial prepayments even within the most defensive of collateral characteristics. Agency CMBS pools provide many call protection features such as yield maintenance provisions, prepayment penalties, lockout periods and defeasance structures.

- **Yield maintenance provisions**
The most common call protection feature within FNMA DUS loans which require a borrower to pay a yield maintenance fee when they voluntarily pay additional principal on the loan. Because this fee increases as rates decline, borrowers are discouraged from paying down additional principal. Fannie will specify what formula is used to calculate the fee and what portion of the fee investors will receive. This additional fee helps mitigate negative convexity by “maintaining” a better yield that would have otherwise been adversely affected by the voluntary prepayment.

- **Prepayment penalties**
These penalties essentially achieve the same concept as yield maintenance fees but are structured as a stated percentage of the outstanding balance which usually declines each year.

- **Lockout period**
This prohibits prepayments during the specified period and some prepayment penalties kick in after a lockout period expires, often found within the GNMA CL/PL program. For example, a GNMA “2/8” Project Loan has a 2 year lockout with an 8% prepay penalty which declines 1% each year thereafter.

- **Defeasance structures**
Commonly found within FHLMC K-Certs that generally follow a specified lockout period. To refinance, US government securities are purchased by the borrower and put in escrow to pay off the loan at scheduled maturity. This effectively locks in the timing of future cash flows, resulting in the best form of call protection available to CMBS investors.

CMBS Cash Flow – Rolling Down the Curve
Traditional single family MBS products give investors a continual stream of cash flow while CMBS products resemble more of a bullet like structure. This is especially useful for portfolio managers with front loaded cash flows seeking to build a smoother cash flow profile by rolling down the curve. Agency CMBS pools generate...
very consistent average lives and lower volatility of duration. As an example, FHMS K705 A2 has 100% defeasance which expires just 6 months prior to the stated maturity. Refer to the chart shown above in Exhibit 2: Given the bond’s CPY will be 0% for most of the bond’s life, if loans pay 100% CPY after defeasance expires, the average life will fall from 5.15 to just 4.9 when rates fall. Compare this to the generic FNMA 15yr with a similar initial average life of 5.92, but contracts to 2.4 when rates fall. In two years, the K705 pool continues to display a stable average life profile as we roll down the curve. From a price volatility perspective, the K705 pool projects potential price depreciation of 13% with rates up 300bps while the generic FN 15 has a similar 14% drop (Exhibit 3). However when we look ahead 2 years in the right side of the table, the K705’s price depreciation of -9% is a much better improvement than the generic 15yr pool with a -12% drop. Moreover, the Freddie CMBS pool has healthier upside potential if rates were to fall by 300bps.

### Exhibit 2:

<table>
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<tr>
<th>Rate Shock</th>
<th>Price Volatility Today</th>
<th>Price Volatility in 2yrs</th>
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</thead>
<tbody>
<tr>
<td>+300</td>
<td>+13.00%</td>
<td>-9.00%</td>
</tr>
<tr>
<td>-300</td>
<td>-10.00%</td>
<td>-12.00%</td>
</tr>
</tbody>
</table>

### Exhibit 3:

![Average Life Comparison: +/- 300bps Rate Shock](source)

Source: Bloomberg L.P.

While each program has excellent call protection, it is important that investors consider the collateral profile as prepayments in the form of defaults are passed through at par when they occur. Overall, defaults are relatively low for the sector. According to Fannie Mae’s 2012 Credit Supplement, 0.24% of their entire Multifamily Guaranty Book of Business was seriously delinquent. One of the heaviest concentrations of multifamily defaults occurred within Fannie 2007 originations with a cumulative default rate of approximately 2.25% compared to an 11.0% cumulative default rate for Fannie Mae single family originations in 2007 (Exhibit 4). For the same 2007 cohort, GNMA CL/PL pools had an approximate 5.4% cumulative default rate. There is limited historical data for FHLMC K-Cert defaults but given the similarity in underwriting standards, it is likely that the same trend will persist. Naturally, the higher LTV collateral will produce higher default rates in GNMA CL/PL securities. By comparison, private label CMBS 2007 vintages report default rates north of 20%.

### Defaults

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### Summary

Allocating Agency CMBS pools may offer your portfolio some much needed call protection in today’s uncertain rate environment. By rolling down the curve, CMBS products provide very stable average lives with reduced price volatility and better upside potential. The chart in Exhibit 5 provides a brief summary of the GSE CMBS product features.

### Exhibit 4:

![Cumulative Default Rates Comparison: 2007 Origination](source)

Source: Fannie Mae, Ginnie Mae

### Exhibit 5: Agency CMBS Products & Features

- **FHLMC K-Certs**
  - **LTV**: Max 75% - Cash Out, Max 80% - Non-Cash Out
  - **Coverage (DSCR)**: Min 1.25x - Cash Out, Min 1.30x - Non-Cash Out
  - **Prepayment Protection**: Yield Maintenance
  - **Loan Terms**: 5, 7, & 10yr Balloons - 30yr
- **FNMA DUS**
  - **LTV**: Max 55% - Tier 4, Max 65% - Tier 3, Max 80% - Tier 2
  - **Coverage (DSCR)**: Min 1.25x - Tier 4, Min 1.30x - Tier 3, Min 1.25x - Tier 2
  - **Prepayment Protection**: Prepayment Fee / Lockout
  - **Loan Terms**: 5, 7, & 10yr Balloons - 30yr
- **GNMA CL/PL**
  - **LTV**: Max 75% - FHA
  - **Coverage (DSCR)**: Min 1.15x - Post Sept 2010
  - **Prepayment Protection**: 1/8 - Prepay Penalty after 1yr
  - **Loan Terms**: 35-40yr Maturities

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